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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/065,174  | 09/24/2002  | Kuo-Kun Tseng        | ATCP0012USA         | 4894             |
| 27765   | 7590        | 05/03/2006           | EXAMINER            |                  |
| NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION<br>P.O. BOX 506<br>MERRIFIELD, VA 22116 |             |                      | DUONG, FRANK        |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2616                |                  |

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/065,174             | TSENG ET AL.        |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Frank Duong            | 2616                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____.   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____.                                   |

### **DETAILED ACTION**

1. This Office Action is a response to communications dated 09/24/02. Claims 1-15 are pending in the application.

#### ***Information Disclosure Statement***

2. The information disclosure statement filed 10/08/2002 complies with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. It has been considered and placed in the application file.

#### ***Ex parte Quayle***

3. This application is in condition for allowance except for the following formal matters:

##### **In the specification:**

Page 18, "Figures" should be deleted.

##### **In the claims:**

###### ***Claim 10:***

Line 9, "as one minus" should be changed to --as a result of one minus--.

Line 11, "said further result" should be changed to --said result further--.

Line 13, "the DMOS" should be changed to --the calculated DMOS--.

###### ***Claim 13:***

Line 11, "as one minus" should be changed to --as a result of one minus--.

Line 13, "said further result" should be changed to --said result further--.

Line 15, "the LMOS" should be changed to --the calculated LMOS--.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

***Allowable Subject Matter***

4. Claims 1-9 are allowed.
5. Claim 10-15 are allowed with a condition that the above discrepancies will be corrected by the Applicants in a response to this Office Action.
6. The following is an examiner's statement of reasons for allowance:

The prior art of record, considered individually or in combination, fails to fairly show or suggest a claimed method of adaptive payout, comprising, among other limitations, a novel and unobvious limitations of combining loss mean opinion score with delay means opinion score to determine a mean mean opinion score, structurally and functionally interconnected with other limitations in a manner as recited in claims 1-9.

The prior art of record, considered individually or in combination, fails to fairly show or suggest a claimed method of adaptive payout, comprising, among other limitations, a novel and unobvious limitations of calculating a delay mean opinion score (DMOS) of the packet as a result of one minus the normalized total delay, said result being raised to a power of a DMOS factor, and said result further being multiplied by a maximum means opinion score, structurally and functionally interconnected with other limitations in a manner as recited in claims 10-12.

The prior art of record, considered individually or in combination, fails to fairly show or suggest a claimed method of adaptive playout, comprising, among other limitations, a novel and unobvious limitations of calculating a loss mean opinion score (LMOS) of the packet as a result of one minus the normalized packet loss rate, said result being raised to a power of a LMOS factor, and said result further being multiplied by a maximum means opinion score, structurally and functionally interconnected with other limitations in a manner as recited in claims 13-15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

7. The prior/related art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jain (USP 6,259,677).

Tseng et al (Patent Application Publication 2004/0057381).

Fujimoto, Adaptive Playout Buffer Algorithm for Enhancing Perceived Quality of Streaming Applications, Master's Thesis, pages 1-54, February 2002.

Lai et al, Perceptual Codec and Interaction Aware Playout Algorithms and Quality Measurement for VoIP Systems, IEEE, pages 297-305, 2004.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is 571-272-3164. The examiner can normally be reached on 7:00AM-3:30PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**FRANK DUONG  
PRIMARY EXAMINER**

April 28, 2006